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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,929	11/21/2003	John M. Forsythe	1957-6012.1US	4005

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EXAMINER	
HYUN, PAUL SANG HWA	
ART UNIT	**PAPER NUMBER**
1797	

NOTIFICATION DATE	DELIVERY MODE
08/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTOMail@traskbritt.com

Office Action Summary	Application No.	Applicant(s)	
	10/719,929	FORSYTHE ET AL.	
	Examiner	Art Unit	
	PAUL S. HYUN	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 July 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-7,9-13 and 15-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-13 and 15-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 27, 2009 has been entered.

Claims 1, 3-7, 9-13, and 15-21 are currently pending. Applicant cancelled claim 8 and amended claims 1, 4, 9 and 10.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims **1, 3-7, 9-13 and 15-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wohleb (US 2005/0059162 A1) in view of Anton et al. (US 2001/0053517 A1) and Gordon et al. (US 5,958,714).

Wohleb discloses a kit and a method for quantitatively analyzing chemicals present in soil and water (see Abstract and [0006]). The kit comprises a sorption vial 20 having a sorbent material 27 disposed therein for extracting a chemical of interest (see Fig. 3). In operation, a sample (e.g. soil, liquid) is placed inside vial 20 to expose the sorbent material to the sample. Once the analyte of interest is collected in the sorbent material, an extraction solution is added to the sorption vial (if the sample is solid) and

the vial is sealed. The vial is then transferred to a lab for further analysis (see Abstract) by gas chromatography (see [0054]). The method disclosed by Wohleb differs from the claimed invention in that Wohleb does not disclose the use of an internal standard. Wohleb also does not disclose that the sample can be crops such as tubers collected at a crop storage facility for determining the concentration of sprout inhibiting chemicals present in the crop samples.

With respect to the internal standard, Anton et al. disclose a kit for collecting and analyzing an unknown sample. The kit comprises a known quantity of internal standard that is used to "spike" the sample. The internal standard is used to determine the natural degradation of the sample from the time the sample is collected and the sample is analyzed (see [0007]). This is accomplished by obtaining the ratio of the quantity of the internal standard at the time of sample analysis and the known initial quantity of internal standard used to spike the sample (see [0022]). In light of the disclosure of Anton et al., it would have been obvious to one of ordinary skill in the art to provide the kit disclosed by Wohleb with an internal standard to account for the natural degradation of the sample while the sample is transported from the sample collection site to the laboratory.

With respect to the crop samples, Gordon et al. disclose that many types of chemical contaminants, such as herbicides, are present in foods (see lines 60-65, col. 4). The reference identifies the need to analyze food samples to determine the extent of the contamination of the crops that humans consume (see Abstract and lines 50-55, col. 18). Specifically, Gordon et al. disclose the steps of acquiring a small portion of a sample (e.g. chopped food) (see lines 60-65, col. 20) and subjecting the sample to

various extraction processes to isolate the deleterious chemical of interest. In light of the disclosure of Gordon et al., and given that the method disclosed by Wohleb is directed towards the analysis of contaminants present in samples that are consumed by humans (i.e. soil and water), it would have been obvious to one of ordinary skill in the art to collect tuber samples from a crop storage location and apply the test disclosed by Wohleb to determine the concentration of herbicides present in the tuber samples. Likewise, it would have been obvious to rinse the tuber sample prior to analysis to remove dirt and other analytes of non-interest. Lastly, it would have been obvious to analyze only a section of the tuber to minimize the time and reagents used for the analysis.

Response to Arguments

Applicant's arguments with respect to the claims have been fully considered but they are moot in light of the new ground of rejection. Nonetheless, some of Applicant's arguments will be addressed because they remain pertinent.

Applicant argues that the claimed invention is patentably distinct from the cited references because none of the references disclose analyzing crop/tuber samples. This argument is not persuasive. As indicated in the rejection, Wohleb discloses a method for analyzing toxic chemicals in soil and water. Although Wohleb does not explicitly disclose that the sample is crops/tubers, it would have been obvious to one of ordinary skill in the art to analyze other human-consumed samples that can become contaminated by toxic chemicals. It is well known in the art that crops such as tubers are susceptible to contamination because they are treated with various chemicals (e.g.

pesticides and sprout inhibitors). Moreover, Gordon et al. provide the motivation for applying the method disclosed by Wohleb to crop samples. Gordon et al. disclose that many types of chemical contaminants, such as herbicides, are present in foods and the reference identifies the need to analyze crop samples for said contaminants (see lines 60-65, col. 4). Thus, Applicant's argument that the claimed invention is patentably distinct because none of the cited references disclose a method of analyzing crop samples for deleterious chemicals is not persuasive.

Applicant also argues that the disclosure of Anton et al. regarding the use of an internal standard to determine the natural degradation of a sample from the time of collection to the time of analysis is not applicable because the disclosure of Anton et al. is limited to nucleic acid analysis. Specifically, Applicant argues that the internal standard utilized by Anton et al. is specific to determining the degradation of nucleic acid obtained from animal subjects, which is substantially different from chemical analysis present in crop samples. This argument is not persuasive because one of ordinary skill in the art would recognize that the concept of using an internal standard as disclosed by Anton et al. can be used to determine the natural degradation of any sample that undergoes natural degradation. One of ordinary skill in the art would recognize that the same internal standard can't be utilized for analyzing nucleic acid and herbicides. That said, the Examiner maintains the position that choosing and utilizing the appropriate internal standard for herbicide analysis is within the skill set of one of ordinary skill in the art. For the foregoing reason, Applicant's argument that the disclosure of Anton et al. is not applicable is not persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL S. HYUN whose telephone number is (571)272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul S Hyun/
Examiner, Art Unit 1797

/Jill Warden/
Supervisory Patent Examiner, Art Unit 1797